



K. WATANABE & ASSOCIATES

10/586670

Patents and Trademarks

IPPO Rec'd PCT/PTO 20 JUL 2006

Kazuhira Watanabe

Koji Kikawa

Takeshi Higuchi

Tetsuji Kodaira

Shigeyoshi Sugano

Hiroshi Ebiya

Hikaru Ohashi

Hiroyuki Satoh

Tatsuya Yamada

Tatsuhiko Nakata

Naru Koike

3rd Fl. No.8 Kikuboshi Tower Bldg.,

20-18, Asakusabashi 3-chome,

Taito-ku, Tokyo 111-0053, JAPAN

TELEPHONE:

813(5820)0535

FACSIMILE:

813(5820)0577

(G IV & GIII)

E-Mail:

kandw@ppp.fastnet.ne.jp

CONFIRMATION

World Intellectual Property Organization

June 20, 2005

PCT Division

34 Chemin des Colombettes

1211 Geneva 20,

Switzerland

Via facsimile

RE: Amendment of Claims under Article 19(1) (Rule 46)

International Application Number: PCT/JP2005/000456

International Filing Date : 17.01.05

Applicant : NGK INSULATORS, LTD.

2-56, Suda-cho, Mizuho-ku,

Nagoya-shi, Aichi 467-8530

Japan

TEL: 052-872-7726

Agent : WATANABE, Kazuhira

3rd Fl., No. 8 Kikuboshi Tower Building,

20-18, Asakusabashi 3-chome,

Taito-ku, Tokyo 111-0053

Japan

TEL: 03-5820-0535

FAX: 03-5820-0577

Agent's Reference : WA-0950

Dear Sirs,

The applicant, who received the International Search Report relating to the above-identified International Application transmitted on 17.01.05, hereby files Amendment under Article 19(1) as in the attached sheets.

The Claim 1 is amended by incorporating the limitation in Claim 5 thereto and the Claim 5 is cancelled. In accordance with this cancellation of Claim 5, the dependency of Claim 6 is revised by deleting Claim 5 from the Claims referred to therein. As to the rest of Claims are remained unchanged.

The applicant also files as attached herewith a brief statement explaining the amendment and any impact that the amendment therein might have on the description and drawings.

Very truly yours,



Kazuhira WATANABE

K. WATANABE & ASSOCIATES

Attachment:

- | | |
|-----------------------------------|--------|
| (1) Amendment under Article 19(1) | 1 copy |
| (2) Brief Statement | 1 copy |

CLAIMS

1. (Amended) A selectively permeable membrane type reactor comprising a catalyst for promoting a chemical reaction, a selectively permeable membrane which
5 selectively allows a specific component to pass therethrough, and a carrier for disposing the catalyst and the selectively permeable membrane, the carrier being a tubular body having two or more gas passages (cells) partitioned and formed by a partition wall formed of a porous body, the catalyst being individually disposed in some of the cells,
10 the selectively permeable membrane being individually disposed in the remainder of the cells, the cell (reaction cell) in which the catalyst is disposed and the cell (recovery cell) in which the selectively permeable membrane is disposed being adjacently disposed, the carrier including one center cell disposed to include a center axis of the carrier and two or more peripheral cells disposed adjacent to the center cell on a periphery of the center cell, the catalyst being disposed in either the center cell or the peripheral cells, and the
15 selectively permeable membrane being disposed in the another.

2. The selectively permeable membrane type reactor according to claim 1, wherein the carrier includes the cells partitioned and formed by the partition wall with a thickness of 10 μ m to 3 cm.

20

3. The selectively permeable membrane type reactor according to claim 1 or 2, wherein the catalyst is a pellet-shaped or bead-shaped catalyst, and is disposed in the carrier by filling the cell of the carrier with the pellet-shaped or bead-shaped catalyst in a packed bed manner.

25

4. The selectively permeable membrane type reactor according to claim 1 or 2, wherein the catalyst is in the shape of a thin film and is disposed in the carrier by

forming the catalyst in the shape of a thin film on a surface of the partition wall which partitions and forms the cells of the carrier.

5. (Canceled)

5

6. (Amended) The selectively permeable membrane type reactor according to any of claims 1 to 4, wherein the carrier is a tubular body with a square, rectangular, or regular hexagonal end face.

10

7. A selectively permeable membrane type reactor comprising a plurality of the selectively permeable membrane type reactors according to claim 6, the selectively permeable membrane type reactors being integrated to form a composite reactor.

Statement under Article 19 (1)

The original Claim 1 is amended by incorporating the limitation in the original Claim 5.

5 As is clear from the International Search Report, the cited documents neither teach nor disclose the selectively permeable membrane type reactor in which the carrier includes one center cell disposed to include a center axis of the carrier and two or more peripheral cells disposed adjacent to the center cell on a periphery of the center cell, the catalyst is disposed in either the center cell or the peripheral cells, and the selectively
10 permeable membrane is disposed in the another.

The original Claim 5 is canceled in accordance with this amendment, and the dependency of Claim 6 is revised to exclude Claim 5 therefrom.